

This is a submission under 37 CFR 1.114. New independent claims 15 and 18 clarify that the claimed control receives information about the amount of ink to be dried, in electrical form, and electrically controls gas flow rate in response to the information.

The Basis for Citing Kolb as Disclosing the Claimed Controller

The Office Action mailed October 9, 2003 cites Kolb, U.S. Patent No. 5,791,247 as disclosing a controller for controlling the flow rate of gas through valves based on the amount of ink deposited during printing as claimed. The Office Action refers, for support, to Figure 1 (reference 103 and 127), and the discussions at Column 1, lines 49 - 67 (herein “discussion (A)”), Column 2, lines 36 - 67 (herein “discussion (B)”), and Column 3, lines 1 - 39 (herein “discussion (C)”).

Reference 103 refers to an “ink demulsifier.” (Col. 5, lines 58 - 60). The “ink demulsifer” is probably the same as the “air demulsifier” that is part of the discussion (C). Reference 127 is to “an adjustable control for regulating the air flow and air pressure delivered to air line 124.” Col. 6, lines 27 - 28. The air line 124 connects the control 127 to an air controller 91 discussed in detail at Column 5, lines 44 - 57. The air controller is probably the same as the air controller of discussion (B).

Turning to the discussions (A), (B), and (C) to which the Office Action refers, Kolb, U.S. Patent No. 5,791,247, refers to a problem that heavy ink coverage on printed material causes sticking o the printed material to blankets. Kolb discloses an air stripper which aids in peeling the printed material from the blankets. Stripper nozzles mounted on the strippers direct streams of air toward the blankets over the top of the printed materials. (Col. 1, lines 49 - 67).

The flow rate of air through each nozzle is controlled with a needle valve. A wrench can be

used to adjust the needle valve. This enables the printer to individually adjust the flow of air through the nozzles. (Col. 2, lines 36 - 67).

An air controller delivers air under pressure to a solenoid-operated valve. A plurality of electrical lines connected to the solenoid lead to the controls of the printing press so that when the printing press is turned on, the solenoid valve is operated to allow air under pressure to flow through the solenoid valve to a T coupling. (Col. 2 line 61 - Col. 3, line 2).

The T coupling is connected to two pressure regulator valves. One of the valves has an actuator that is movable in an up position to rotate the valve. When the actuator is moved to the down position, the valve is locked. The valve is a Speed-Aire Flow Control Valve Model No. 6ZC33A¹. The valve has a housing having an upwardly directed threaded portion and a nut on the threaded portion that holds the valve in the housing. The actuator is located above the top of the housing (Col. 2, lines 2 - 13).

The second flow control valve connected to the T coupling is also mounted on top of the housing. This valve has an upwardly-directed threaded portion that accommodates a nut used to clamp the second valve to the top wall of the housing. The second flow control valve has an outlet nipple that accommodates a hose leading to a pair of air flow control valves mounted on top of the housing. Each air flow control valve has an outlet nipple that accommodates a separate elongated flexible hose and a threaded member that can be turned to adjust the rate of flow through the valve. (Col. 3, lines 14 - 23).

Hoses connected to the air flow control valves are joined to elongated hollow bars having a

¹ A Google search on the Internet failed to provide any additional information about this valve.

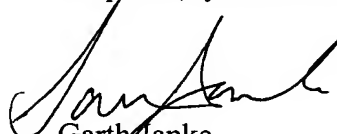
plurality of small holes. Each bar has circular journals that accommodate bands which hold the bars on cross members of the printing press. The bars are "air emulsifiers" in that they discharge streams of air toward the ink on the rollers. (Col. 3, lines 25 - 39).

Summary of What Kolb Discloses

Regarding the air stripper, the above demonstrates that Kolb discloses utterly conventional air flow control valves that are turned by wrenches or by hand to adjust air flow rate. The above also demonstrates that the "ink demulsifier" ("air demulsifier" in discussion (C)) is simply a bar with holes in it and is therefore not adjustable at all.

The claims have been amended to clarify that the claimed air flow control is provided electrically and, therefore, is capable of sufficiently quick adjustment to be responsive to information about printing as claimed.

Respectfully submitted,


Garth Janke
Reg. No. 40,662

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